FIG. 1

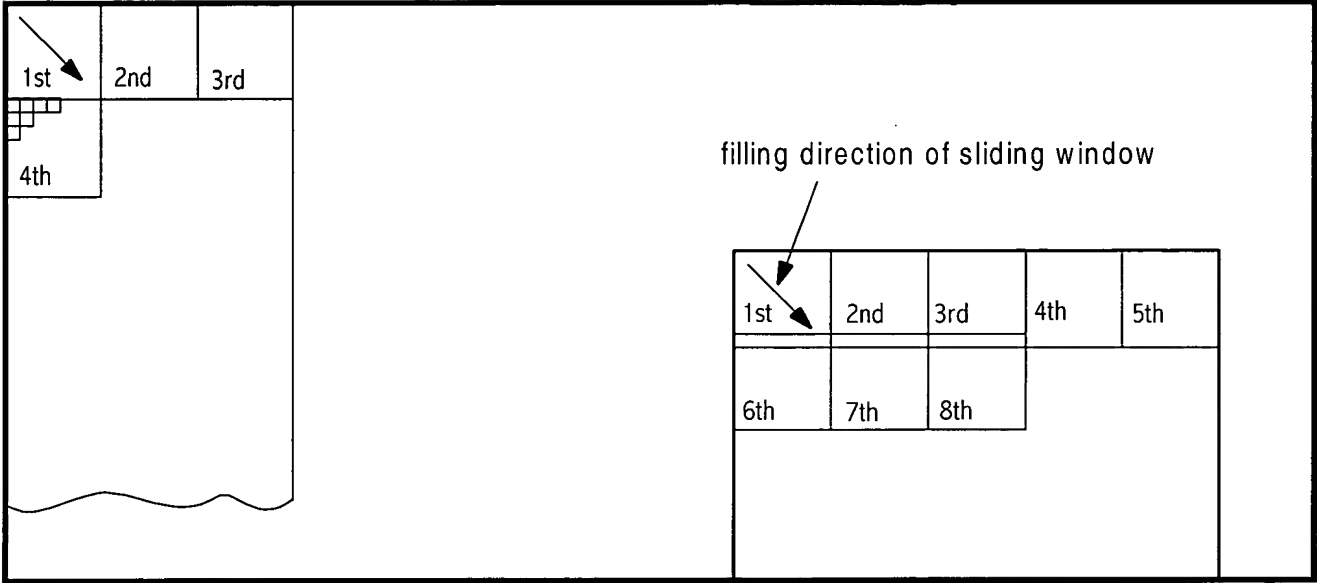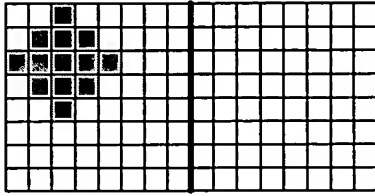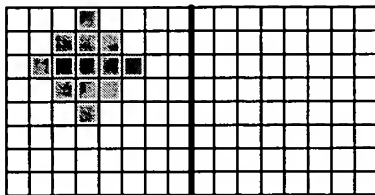image

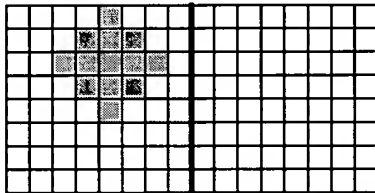filling direction of sliding window

FIG. 2

Initial condition, 5x5 filter will be processed centered on the third row, starting centered on the third column.
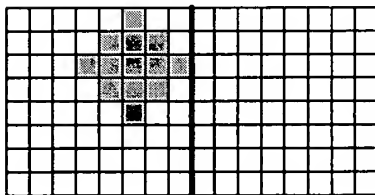
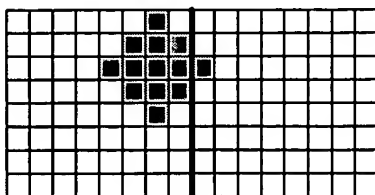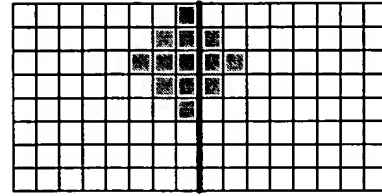Filter centered on 4th column

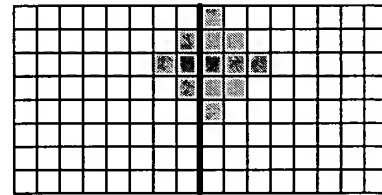Filter centered on 5th column

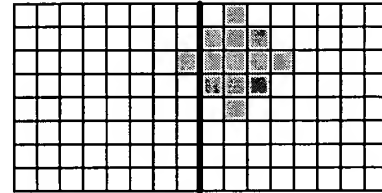Filter centered on 6th column

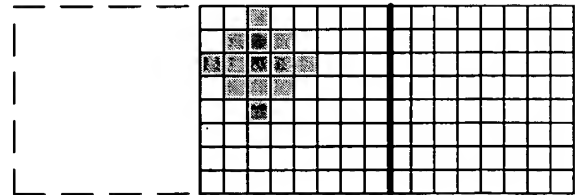Filter centered on 7th column

Filter centered on 8th column

Filter centered on 9th column

Filter centered on 10th column

Filter centered on 11th column, left block no longer required and swapped out

Note that this block is identical to the 1st block, identical addressing and thus code can be used.
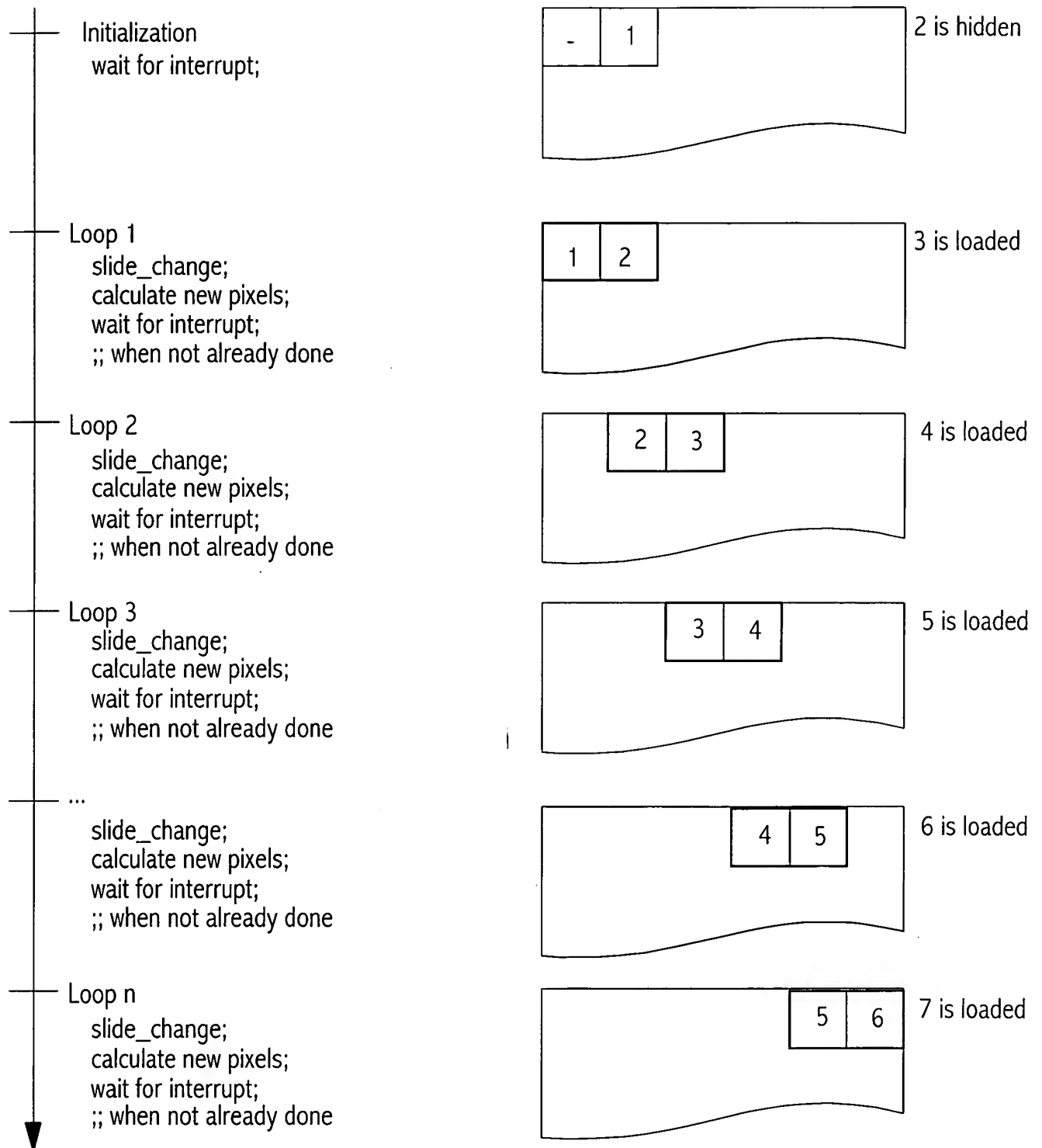
FIG. 3

Initialization
    wait for interrupt;

| - | 1 | 2 is hidden

Loop 1
    slide_change;
    calculate new pixels;
    wait for interrupt;
    ;; when not already done

| 1 | 2 | 3 is loaded

Loop 2
    slide_change;
    calculate new pixels;
    wait for interrupt;
    ;; when not already done

| 2 | 3 | 4 is loaded

Loop 3
    slide_change;
    calculate new pixels;
    wait for interrupt;
    ;; when not already done

| 3 | 4 | 5 is loaded

...
    slide_change;
    calculate new pixels;
    wait for interrupt;
    ;; when not already done

| 4 | 5 | 6 is loaded

Loop n
    slide_change;
    calculate new pixels;
    wait for interrupt;
    ;; when not already done

| 5 | 6 | 7 is loaded

FIG. 4